



**PEAVEY®**  
ARCHITECTURAL ACOUSTICS®

# RTD™ 215

## Stereo 2/3 Octave Equalization System

### SPECIFICATIONS

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All specifications are typical unless otherwise noted.

0 dBV = 1 volt

All specifications are referenced to nominal output level (0 dBV) unless otherwise noted.

All measurements are wideband 20 Hz to 20 kHz unless otherwise stated.

**NOTE:** All specs measured at 1V RMS input and unbalanced output. All sliders at mid position, all switches out unless otherwise noted.

#### FREQUENCY RESPONSE (Balanced and Unbalanced outputs)

± 1 dB 20 Hz - 20 kHz

#### DISTORTION

.003% 20 Hz - 20 kHz

#### COMMON MODE REJECTION RATIO (CMRR)

36 dB typical

#### INPUT IMPEDANCE

Unbalanced: 20K ohms

Balanced: 20K ohms (Equal impedances to ground)

#### OUTPUT IMPEDANCE

Unbalanced: 100 ohms

Balanced: 160 ohms

#### MAXIMUM INPUT LEVEL

Unbalanced: +24 dBV (15.8V RMS)

Balanced: +24 dBV (15.8V RMS)

#### MAXIMUM OUTPUT LEVEL

Unbalanced: 18 dBV (8V RMS)

Balanced: 24 dBV (15.8V RMS)

#### NOMINAL INPUT LEVEL

Unbalanced: 0 dBV (1V RMS)

Balanced: 0 dBV (1V RMS)

#### NOMINAL OUTPUT LEVEL

Unbalanced: 0 dBV (1V RMS)

Balanced: +6 dBV (2V RMS)

#### INPUT HEADROOM

Nominal = 24 dB

#### OUTPUT HEADROOM

Unbalanced: 18 dB

Balanced: 18 dB

#### OUTPUT NOISE: UNBALANCED OUTPUT

EQ Out: -98 dBV

EQ In, all Flat: -96.5 dBV

#### FILTER BANDWIDTH

2/3 octave

#### FILTER FREQUENCIES

25, 40, 63, 100, 160, 250, 400, 630, 1K, 1.6K, 2.5K, 4K, 6.3K, 10K, and 16 kHz

#### FILTER Q

2.36

#### MAXIMUM BOOST & CUT FILTERS

± 12 dB (± 12 dB position)

± 6 dB (± 6 dB position)

#### MAXIMUM BOOST & CUT GAIN (Wideband gain)

± 12 dB (± 12 dB position)

± 12 dB (± 6 dB position)

#### HIGH CUT FILTER:

(12 dB per octave frequency)

Out: 30 kHz

In: 16 kHz

#### LOW CUT FILTER:

(12 dB per octave)

Out: 12 Hz

In: 40 Hz

#### FEATURES:

- Two 2/3 octave, 15-band equalizers (ISO standard centers)
- Switch selectable ± 6 and ± 12 dB ranges
- Broadband level controls
- Switch selectable low and high cut filters
- EQ Bypass functions
- Balanced inputs and transformer balanced outputs (1/4" phone jacks also provided)
- Quiet power-up and power-down modes
- +24 dBV input and output capability (headroom)
- 1 1/4" single rack space package

#### DESCRIPTION:

The Peavey Architectural Acoustics RTD™ 215 is a unique and extremely flexible two channel equalization system. Each channel offers 15 bands of EQ on 2/3 octave center frequencies at 25, 40, 63, 100, 160, 250, 400, 630, 1K, 1.6K, 2.5K, 4K, 6.3K, 10K, and 16 kHz, with selectable range for ± 12 dB

or  $\pm 6$  dB boost or cut. This allows a range of spectral control usually not available in two channel, stereo graphic equalizers. A broadband level control is also provided with a range of  $\pm 12$  dB, as well as switch selectable low and high cut filters at 40 Hz and 16 kHz.

Balanced and unbalanced inputs and outputs are "standard equipment" and the excellent dynamic range and high signal-to-noise ratio prove that the RTD 215 is truly professional in design and application.

### ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

The active equalizer shall be a dual channel, fifteen band, rack-mountable unit with two-third octave filters placed on standard ISO centers. The unit shall have two high impedance  $\frac{1}{4}$ " unbalanced inputs, one low impedance XLR balanced input, two low impedance  $\frac{1}{4}$ " unbalanced outputs, and one low impedance XLR balanced output for each channel. Equalization func-

tions for each channel shall provide  $\pm 12$  dB @ 25, 40, 63, 100, 160, 250, 400, 630, 1K, 1.6K, 2.5K, 4K, 6.3K, 10K, and 16K Hertz. Front panel controls for each channel shall include a broad-band gain control with  $\pm 12$  dB of range to help restore the unity gain function resulting from equalization loss (or gain); an EQ bypass switch for unity gain reference measurements; a range switch to select either  $\pm 6$  or  $\pm 12$  dB of equalization range; a low cut filter switch providing low frequency roll off at 40 Hz at 12 dB per octave; and a high cut filter switch providing high frequency roll off at 16 kHz at 12 dB per octave. Finally, the front panel shall have a mains power switch with an associated power LED.

Each channel shall be capable of delivering +24 dBV (16V RMS) at the balanced output and +18 dBV (8V RMS) at the unbalanced outputs. Further, each channel shall be capable of accepting +24 dBV (16V RMS) at both the balanced and unbalanced in-

puts. The frequency response of each channel shall be  $\pm 1$  dB from 20 Hz to 20 kHz and the total harmonic distortion of each channel shall be less than .003% from 20 Hz to 20 kHz, both of these specs being measured at 0 dBV (1V RMS) using either balanced or unbalanced inputs or outputs. Hum and noise for each channel shall be less than -96 dB below 0 dBV from 20 Hz to 20 kHz unweighted. The unit will be packaged in a rugged metal chassis 19" wide by 1 $\frac{3}{4}$ " high by 10" deep, and shall operate on 120V AC, 50/60 Hz, and consume 15 watts. The published specifications shall be met or exceeded. The active equalizer shall be called a Peavey Architectural Acoustics RTD™ 215.

### LIMITED WARRANTY

Peavey Electronics Corporation warrants to the original purchaser of this new Architectural Acoustics product that it is free from defects in material and workmanship. If within one (1) year from date of purchase a properly installed product proves to be defective and Peavey is notified, Peavey will repair or replace it at no charge. (Note: Batteries and patch cords not covered.) "Original purchaser" means the customer for whom the product is originally installed.

Damage resulting from improper installation, interconnection of a unit or system of another manufacturer, accident or unreasonable use, neglect or any other cause not arising from defect in material and workmanship is not covered by this warranty. The warranty is valid only as to products purchased and installed in the United States.

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